

# PATENT ABSTRACTS OF JAPAN

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(30)Priority

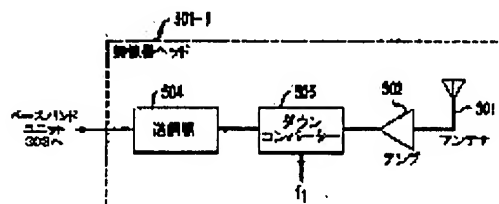
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(54) RADIO COMMUNICATION EQUIPMENT AND RADIO COMMUNICATION METHOD THEREFOR

(57)Abstract:

PROBLEM TO BE SOLVED: To reduce cost by providing a means for transmitting a first information transportation signal received by the first antenna of a first radio frequency by a first intermediate frequency via a first cable and receiving/demodulating the first information transportation signal.

SOLUTION: A plurality of information transportation signals received by an antenna 501 are down-converted into intermediate frequencies by a down converter 503. The respective intermediate frequency information transportation signals from respective radio machine heads 301-i are transmitted to a base band unit 303 on a single cable in a transmitter 504. When the plurality of radio unit heads 301-i share one cable at that time, the



transmitter 504 frequency divides/multiplexes the intermediate frequency information transportation signals from the corresponding radio machine head on the shared line and they can be demultiplexed in a base band. The base band unit 303 receives K-pieces of information transportation signals from N-pieces of radio unit heads, multiplexes them and makes them constituted of U-pieces of different traffic channels.

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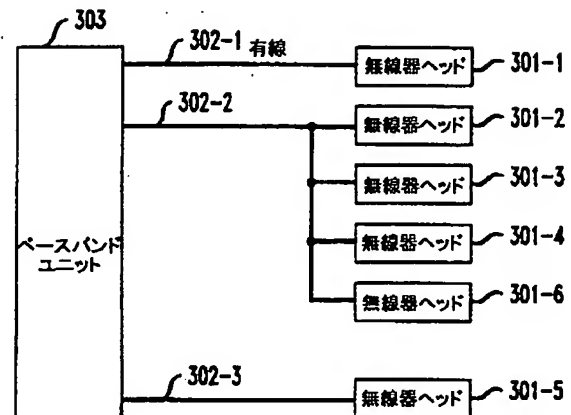
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(54) 【発明の名称】 無線通信装置および無線通信方法

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 - M•Ø QA ei~A  
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 ikj Q æ^ M Q g ~ QL  
 ~ M•Ø Q M ~A  
 ilj QL ' Q g ~ Q æ^ M  
 M A Q æ^ M †•ØLi~ L•Ø  
 - ~ `¥~•Ø‡ PL † 'Mß@B  
 yz Uz imj P æ^ M ~ Q æ^  
 M \_Co[V`R oCj O•ØLi L•Ø-  
 ~ `¥~•Ø‡ TL † 'Mß@B  
 yz Vz i`j PA ei ~ P†  
 g ~ P æ^ M M•ØXebv~A 40  
 iaj P\_E R o[~^ [ ~ P æ^ M  
 P g ~\_E R o[g•ØXebv  
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 icj PL ' P g ~ P æ^ M  
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 yz Wz iej QA ei ~ Q† 50

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 ioj QL ' Q g ~ Q æ^ M  
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 P~ROP|U~\_E NM M•Ø Kv  
 ~ u L•Ø / •Ø-~ ~ ~«Ø- ~ ~ /B  
 yOORÖz}T~A {Æ }/~† wbhROP  
 | u bN}~ LAA eiTOPAA vTO  
 QA\_E R o[^[TORA M TOS L A  
 -Æ ~ ~ç)f•Ø / ~ ~ ~Æ~çØB  
 yOORPzA eiTOP~A† † wbh ~  
 fiØ A ei L T[rX†Æ~çØ Qn I  
 ~ ~ ~¥ ~ fÆ~çØ ~ fiS ~ fÆ~ç~ç /

" Pn I ~ ~ ~ T[rX ~ c0BA eiTO  
 P~A Pn I ~ ~ ~ P > ~ ; ~ æ ^  
 M M A† 'MVXe Q ^f0 / ~ X  
 v AX(spurious) M M•0B  
 yOORQzA vTOQ~A m B@~e æ ^  
 M M > x ~ .0 [mCYA v~ 0B  
 yOORRz\_E R o[ ^[TOR~Ae æ ^  
 M g ~ \_E R o[g Ae† w  
 bh' e æ ^ M "P' L ~ M•0-  
 ~ '¥ .0BQ > ~ »E" ~ t wbh" 10  
 P' L /L•0E A\_E R o[ ^[TOR  
 "e æ ^ M g ~ \_E R o[g  
 Ae æ ^ M "x[Xo h jbgROR ~  
 /LL ~ g " &d»•0-~"~«0B m  
 / \_E R o[ ^[TOR~Ef, A~LT  
 [A [J >U Ao hpXtB ^[ ~ ~ »  
 c•0-~"~«0B  
 yOORSz M TOS~A† wbhROP|  
 ~ flL ~ x[Xo h jbgROR ~  
 e g æ ^ M M•0BQ > ~ »E 20  
 ~ t wbh" P' L /L•0E A M  
 TOS~A» /LL ~ .0† wbh'  
 g æ ^ M g " &d» Ax  
 [Xo h jbgROR Lf} ~ v NX~«  
 0 / †E0B M TOS »c~ p•0B  
 e" ~ «0- ~ s/B  
 yOORTz}U~A {E }/ P x[Xo h  
 jbgROR u bN)~ 0Bx[Xo h j  
 bgROR~A M UOP|P~UOP|RAtB  
 ^UOQ|Q~UOQ|TA~^cUOR|P~UOR 30  
 |UA' l CU[UOS|P~UOS|UAj~m  
 ~t' l \_Co[V~R oCiUOT L A-  
 E ~ }f•0 / ~ c' ~ "E~c0B  
 yOORUz x[Xo h jbgROR~A~ m'  
 † wbh »E...E' ~ j' æ ^ M  
 i~ j~m' æ ^ M j M A--~e  
 æ ^ M "GAC ^tF[XW ] ~ ~ &d»  
 †EAt' 'X g tBbN' l i~ j~t  
 g tBbN' l ~ o[W j' ~ 0  
 / †E0Bx[Xo h jbgROR~A m B 40  
 @~j' æ ^ M »E...E' l A  
 †Af} ~ v NX A &OLj~t' †g  
 tBbN' l ~ m' ~ fl .0~ mEF  
 [ \_Co[V~R oC s cAj~tg tBb  
 N' l L' c¥" 0B  
 yOORVz M UOP|P~UOP|R~AL R  
 OQ|P~ROQ|R I[ ^fA' ^c~ . &  
 ~tB ^ c, E' ~E L ~ g  
 æ ^ M æ •0B  
 yOORWz}RAS ~ fl0 {E ~ c~U' † 50

wbh L A-E / cS' ~ L ROQ|Q  
 /L•0 ~ Ax[Xo h jbgROR~A-E  
 † wbh' L ROQ|Q~ &d»†E&  
 g æ ^ M f} ~ v NX•0 Kv  
 ~æH' ~0B&> L ~ &> †  
 wbh T|[g•0 / x[Xo h jbgR  
 OR »c p•0B@ ~ ~ «0- ~ s/B  
 yOORXzEf, A† wbhROP|Q~ROP  
 |T~»E ~ .0 æ ^ M g " &d  
 » ~L ROQ|Q~ ; M ~ c•0 ~AL  
 ROQ|Q~Ao hpXtB ^UOQ|Q~UO  
 Q|T ~ .0B-E tB ^UOQ|Q~UO  
 Q|T~AL ROQ|P~ g æ ^ M  
 f} ~ v NX•0 / v†E~c0B&~  
 ~A† wbhROP| ~ M ~ tB  
 ^UOQ| ~ .0B" ~ A† wbhR  
 OP|P~ ROP|U~ ^c~ . ~  
 †E0-~"~»E...E~«0x[Xo h jbgRO  
 R ~ ~ "E~c0' ~ 0B  
 yOOSOz {E ~ c~AR' ~ 0L p c  
 0U' † wbh L•0 ~A ~ 0 †  
 wbh ~ 0 L p c0B@ ~ ~ «0-  
 ~ s/Be g " &d»M ~Ao hpXtB ^  
 [ L~f•0Kv" 0~A~ ~E tB  
 ^ »c p•0B@ ~ ~ «0- ~ s/B  
 yOOSPz~^cUOR|P~UOR|U~»E...  
 EAK ~ \_Ci~bN W~ T v O C  
 g ~ g æ ^ M fw^ » ~A S  
 M K l•0B~^cUOR|P~UOR|  
 U »c p•0B@ ~ ~ «0- ~ s/B  
 yOOSQz' l CU[UOS|P~UOS|U  
 »E...E~A~ j' g æ ^ M ~  
 l ; ~ † Ae æ ^ M f} ~ v  
 NX ~A~ j~t' ~X g tBbN' l  
 ¥"l j~m~t' l \_Co[V~R oCi  
 UOT ~ .0 ~ 0B' l CU[UOV  
 |P~UOV|U »c p•0B@ ~ ~ «0-  
 ~ s/B  
 yOOSRzj~m~t' l \_Co[V~R oC  
 iUOT~Am' ~ l CU[ ~ 'X g tB  
 bN' l ~ j~t' ¥"l M A m  
 \_Co[V~R oCj OZp p c~mEF[\_C  
 o[V~R oCj O s~Aj~t' ~X g  
 tBbN' l L c¥"l 0Bj~m~  
 t' l \_Co[V~R oCiUOT »c  
 p•0B@ ~ ~ «0- ~ s/B  
 yOOSSz}V~A Q x[Xo h jbgRO  
 R u bN) f ~ LA-E~Au bN†  
 Zp p c0-~"~O~ P x[Xo h jbgR  
 OR~fl1~@¥ æ •0B)V x[Xo h j



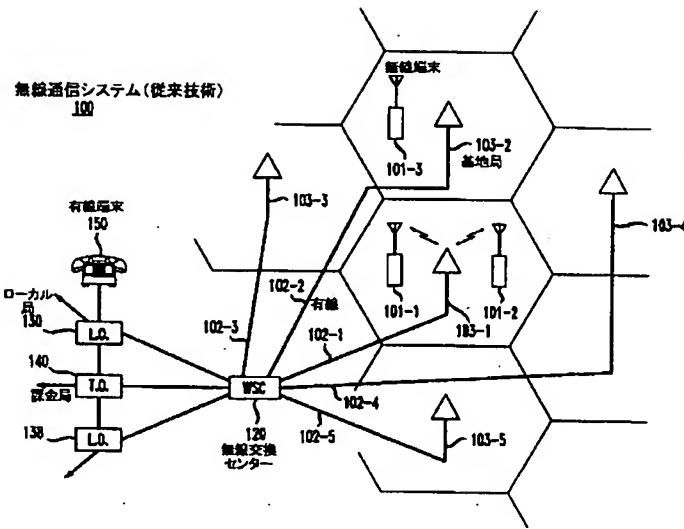
11

bgrOR^A M VOP|P^VOP|RA^c  
 ^ . VOR|P^VOR|RAj~m~t^ l  
 u bN+ VOT L A-E ~}f.0 /  
 ^ ^E^c0B  
 yOOSTz M VOP|P^VOP|R^A>E...  
 EL ROQ|P^ROQ|R I[ a A>E...  
 E^c^ . VOR|P^VOR|R ^-E L  
 ^ g a^ M .0B  
 yOOSUz ^c^ . VOR|P^VOR|R^>  
 E...EAK ^\_Ci~bN W^ T v O 10  
 Cg^PE L ^ g a^ M .  
 ^ fw^ > A S M K l.0B  
 ^c^ . VOR|P^VOR|R >^ p.0  
 B^ ^ ^0^ ^/B  
 yOOSVzu bN+ VOT^A^c^ . V  
 OR|P^VOR|R^ fw^ >M M Aj  
 ~tg tBbN^ l 0 / v O ~ O  
 ^E^c0fw^ VOi v ZbV OZp p^  
 0fw^ VOi v ZbT^ 0B  
 yOOSWzu bN+ VOT^AP >^; 20  
 ^ I^+ ^fl^E^ s/^A>E ^  
 ^0^>^ ^ ^0B P A^ I^+  
 ^PE a^ M .0Bu bN+ ^E  
 ^ A; a^ M fl .0-^ ^-  
 0B  
 yOOSXz Q A^ I^+ ^A+ g  
 iil pv^AC \_N^A>U ^j L>^  
 ^EA a^ M ^A>E i dC^<  
 ]^s EA>E L <>L E0Bu b  
 N+ ^A^ I AfW^ VOi v ZbT^ 30  
 ^LA a^ M ^YtgEFAN Yt  
 gEFAP [^ LKL^E0B  
 yOOTOz R A a^ M ^<i^tBfA  
 o h ^j fl0^>^A^ I^+ ^c  
 ^AP >^; ^ t g i ^f0-^  
 Ls ^0-^ ^-0B ^I Au bN+  
 fl0 a^ M ^<^>^Au bN+  
 \$ .0YtgEFAN ^ % ^YtgEFAP  
 [^ ^>^ ^0-^ Ls ^0-^ ^-  
 0B- ^ LAu bN+ ^L^ ^0 40  
 / ^LA^M N ^ uI AbvO [h  
 .0-^ ^ ^-^c0B  
 yOOTPz S A^E^ u bN+ ^CG.0  
 i^ ^ Y^ L.0; ^ I^+ L  
 ERXg^ ^0B  
 yOOTQz T Au bN+ ^; a^  
 M .0 ^Au bN+ ^P^ a^  
 M Ffl.0^ I^+ ^ ^ ^s/^

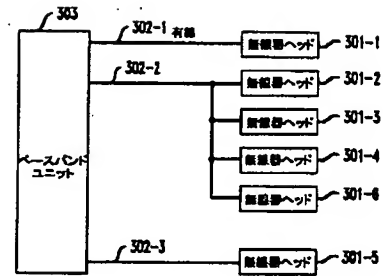
12

^ ^<^ / ^A a^ M i\_Cove  
 BR oC Ar[ tH[~ OA ^ l -  
 ,>^j s/^ ^-^0B  
 yOOTRzu bN+ VOT^AiPj/L L  
 ^ e g a^ M g ^ f)^  
 v NX AiQj^ j^ g a^ M  
 ^ l ; ^ t Airje a^ M  
 ^ j~t^ ^X g tBbN^ l Y^l  
 ^f0 / f)^ v NX AiSj m \_Co  
 [V^R oCj OZp p^~mEF[\_Co[V  
 ^R oCj O s^Aj~t^ ^X g tBb  
 N^ l L cY^l 0Bu bN+ V  
 OT >^ p.0B^ ^ ^0^ ^/B  
 y)^ ^P^ z  
 y)Pz] Zp + ^MVXe T^>B  
 y)Qz M\_Co[V^ p^0] Zp n  
 u bN)B  
 y)Rz{> {E }/^ ^MVXe T^  
 }B  
 y)Sz{> {E }/^ ^MVXe u  
 bN)B  
 y)Tz}S + ^MVXe ]/^ wbh  
 u bN)B  
 y)Uz}S + ^MVXe ]/ P x[Xo  
 h jbg u bN)B  
 y)Vz}S + ^MVXe ]/ Q x[Xo  
 h jbg u bN)B  
 y z  
 POO + ^MVXe  
 POP + [  
 POQ L  
 POR n  
 PQO + .Z ^[  
 PRO [J  
 PSO  
 PTO L [  
 ROP + wbh  
 ROQ L  
 ROR x[Xo h jbg  
 TOP A ei  
 TOQ A v  
 TOR \_E R o[^ [  
 TOS M  
 UOP M  
 UOQ tB ^  
 UOS ^ l CU[  
 UOT j~m~t^ l \_Co[V^R oCi

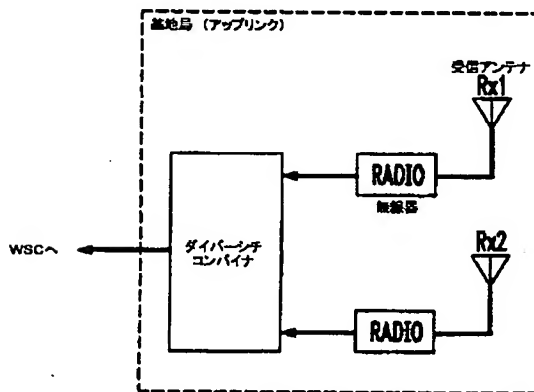
y) P z



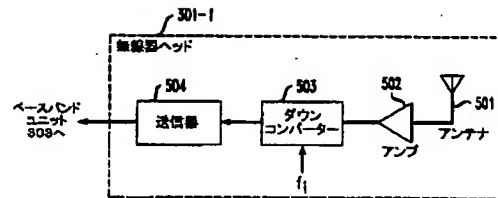
y) S z



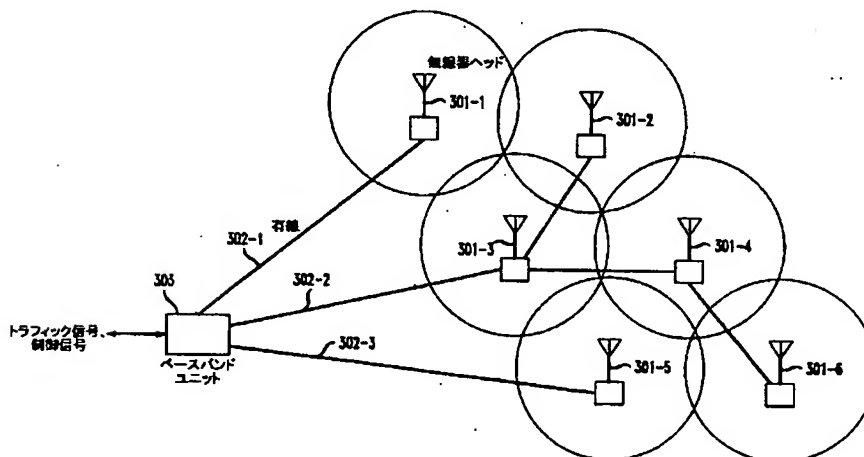
y) Q z

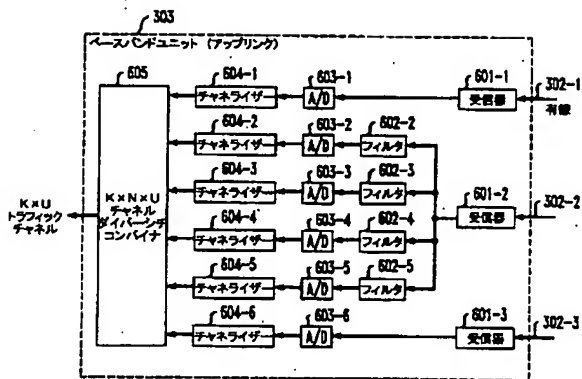
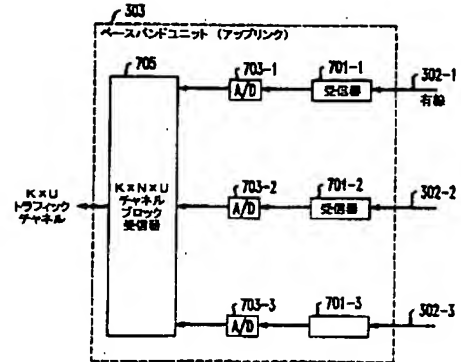


y) T z



y) R z



$$y \} U z$$

$$y \} \vee z$$


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A J O 008889 j [w [w
[Cz CgnEX XecV Cu[
C v CX 14
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